

-1- (JAPIO)	86-140066
ACCESSION NUMBER	ZINC ALKALI BATTERY
TITLE	(2000582) MATSUSHITA ELECTRIC IND CO LTD; (2000618)
PATENT APPLICANT	MITSUMI MINING & SMELTING CO LTD
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APPLICATION DETAILS	84.12.12 84JP-262139, 59-262139
SOURCE	86.11.14 SECT. E, SECTION NO. 454; VOL. 10, NO. 337, PG. 25.
INT'L PATENT CLASS	H01M-004/42; C22C-018/00
JAPIO CLASS	42.9 (ELECTRONICS--Other); 12.2 (METALS--Metallurgy Heat Treating); 12.3 (METALS--Alloys)
ABSTRACT	<p>PURPOSE: To obtain a low pollution zinc alkali battery by employing zinc alloy containing Ni and Al within proper content for the negative pole thereby reducing the hardening rate of negative pole zinc.</p> <p>CONSTITUTION: Zinc alloy containing 0.01-0.5wt% of nickel and 0.005-0.2wt% of aluminum is employed for the negative pole of zinc alkali battery. When adding both Ni and Al to negative pole alloy, remarkable corrosion-proof effect is achieved when compared with the case where said element is added independently. It is assumed that the dispersion suppressing effect of mercury into the alloy is further improved by adding Ni and Al to zinc while corrosion resistance is improved considerably by reducing the surface area of zinc alloy particle thus to exhibit complex effect. Remarkable complex effect is recognized only when the content of Ni and Al in zinc alloy composition is within said range. Consequently, a zinc negative pole having low hardening rate is obtained.</p>